



Cordell Bank National Marine Sanctuary

SANCTUARY ADVISORY COUNCIL

MEMBERS:

Carol Keiper
Research

Lance Morgan
Conservation

Chuck Wise
Maritime Activity

Tom Lambert
Community-at-Large Sonoma

Doreen Gurrola
Education

David Swatland
U.S. Coast Guard

Daniel Cohen
Research Alternate

Todd Steiner
Conservation Alternate

Josh Churchman
Maritime Activity Alternate

Michael Mery
Community-at-Large Marin Alternate

Agenda Cordell Bank National Marine Sanctuary Advisory Council PRBO December 6, 2007

Time

9:00-9:15

9:15-9:30

9:30-9:40

9:40-10:20

10:20-10:30

10:30-10:40

10:40-10:50

10:50-11:20

11:20-12:00

12:00-12:10

12:10-12:20

12:20-1:00

1:00-1:15

1:15-1:30

1:30-2:30

2:30-2:45

Topics and Objectives

**Welcome, Roll Call,
Review Agenda**
– Tom Lambert

Review September 19th Minutes
– Tom Lambert

Public Comment

Manager's Report
– Dan Howard

Education Report
– Jenny Stock

Research Report
– Lisa Etherington

Break

Council Member Updates
– Tom Lambert

SF Bay Oil Spill Report
– Dan Howard, Captain Swatland

Council Seat Turnover and Vacancies Update
– Rowena Forest

**Set 2008 Meeting Dates, Include Joint meeting with
GF Council in March**
– Tom Lambert

Lunch

HR Bill 1187 Update
– Tom Roth

Questions for Tom Roth
– Tom Lambert

Science and Technology of Offshore Aquaculture
– Corey Peet, Monterey Bay Aquarium

Aquaculture Discussion and Questions
– Tom Lambert

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Minutes

Materials Distributed –

- _September 19th minutes
- _December 2007 Agenda
- _Jennifer Stock's education report

Meeting Commenced at 9:15 a.m.

Melissa Pitkin of PRBO Conservation Science greeted the SAC and gave an overview of the new PRBO offices and programs.

Roll call, Review Agenda – Tom Lambert

Roll -

Council Members Present:

Tom Lambert
Lance Morgan
Doreen Gurrola
Carol Keiper
Dan Cohen
Captain Swatland
Michael Mery

Council Members Absent:

Josh Churchman
Chuck Wise
Todd Steiner

Voting Alternates:

Michael Mery

Staff Present:

Dan Howard
Rowena Forest
Lisa Etherington

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Review Last Meeting's Minutes

Motion

Doreen Gurrola moved to accept 9-19-07 minutes as amended

Lance Morgan seconds

All in favor

Public Comment – Tom Lambert

Ingrid Overgard – of the Seaflow organization introduced herself, and commented regarding ocean noise pollution and ship strikes of whales. She raised the issue of requiring speed limits for vessels, which would reduce pollution, strikes, and ocean noise.

Manager's Report – Dan Howard

Budget – We will be on a continuing resolution through the end of December which means no spending unless approved by HQ.

Management Plan – Finished final edits on final rule/regulations which will now be reviewed by NOAA attorneys. It is looking like the management plan will be finished sometime this summer.

Cosco Busan oil spill – we have been working on developing criteria that will determine sign off endpoints for coastal beaches. These endpoints will identify when a beach section is clean and cleared for the responsible party to walk away.

I will defer my comments on the Sanctuary expansion hearing because Tom Roth will be reporting on that later in the meeting.

Dan delivered Jenny Stock's Education Report:

California signage plan update

Oakland Museum Exhibits and Facilities update:

Sanctuary partnership with Point Reyes National Seashore Association to hire an outreach specialist for Park and Sanctuary to promote ocean conservation.

KWMR Radio show, "Ocean Currents" update - Dan reminded the SAC this is a great way to get information out to the public and conduct outreach. Jenny's shows are archived through "pod-casts". They can be accessed through the KWMR and Cordell Bank websites.

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Kip Evans Cordell Bank video for outreach – he has delivered final product video to Cordell Bank. The video will be shown at the Point Reyes National Seashore visitor center.

ACES – Animals in Curriculum-based Ecosystem Studies update

Member Updates – Tom Lambert

Doreen Gurrola –

Support for increasing the amount of research days Cordell Bank will have aboard the RV Fulmar for 2008 –

The Fulmar is a shared vessel between Monterey Bay, Gulf of the Farallones and Cordell Bank National Marine Sanctuaries. Doreen will incorporate all SAC comments regarding this into a letter to Dan Basta, and re-distribute to the SAC one month before the next SAC meeting. Then she will send the final copy to Dan Howard and Dan Basta.

Michael Mery –

Tomales Bay Watershed Council update

Dan Cohen –

Summary of the December 5th research seminar at the Bodega Marine Lab by Professor Hildebrand from Germany: Species diversity in response to richness/density/biomass.

Lance Morgan –

Human use mapping for Marine Life Protection Act project has been followed by a project to map human uses within near-shore waters off California. Coastal human uses include commercial, industrial, and recreational activities.

Captain David Swatland –

All Coast Guard offshore weapons training is still suspended within or near the three Central California Sanctuaries. Training is being conducted in San Diego at a training center.

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Tom Lambert –

Tom handed out the Blue Oceans Green Communities Initiative introductory letter from Dan Basta, and asked the Council to review this and consider a proposal responding to Dan Basta's request.

Research Report – Lisa Etherington

NOAA Fisheries Cruise – NOAA vessel *David Starr Jordan* will be working at Cordell Bank from November 12-14, 2007

Main objectives of the cruise:

To test methods of measuring schooling rockfish with ROV using lasers. Targets were chili pepper, widow, and yellowtail rockfish.

To collect jumbo squid for basic life history data.

Slides –

Habitat

Schooling habits

Substrate

Squid fishing

Collecting squid data

San Francisco Bay Oil Spill – Dan Howard, Captain David Swatland

Captain Swatland's Summary –

There was an "allision" with the vessel, Cosco Busan and the Bay Bridge, on *November 7, 2007*. There are approximately 12 investigations taking place at this time into the events that led up to the spill. The Coast Guard is under scrutiny, although not necessarily rightly so in this instance. Captain Swatland summarized the events that led up to the allision between the Cosco Busan vessel and the Bay Bridge, including the on-board mistakes that occurred during piloting. Captain Swatland summarized what happens during Coast Guard monitoring of vessel traffic in the Bay. The initial response is based on the Area Contingency Plan. Initial investigation shows that the response to the spill was adequate and timely. Captain Swatland covered the dynamics of oil in salt water when first spilled.

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The Coast Guard was not the sole agency responsible for notification to governments and the public after/during a spill. The Coast Guard probably should not have given an initial estimate of the amount of fuel spilled – it is hard to estimate quickly. It takes calculations and testing which can take many hours to determine the exact amount of oil spilled.

Cleanup cost estimates have been calculated.

Incorporating volunteers into the oil spill cleanup turned into a major public and media issue, because people wanted to help with clean-up right away. Oil is toxic, so there must be some volunteer training and precautions taken before the public is allowed to participate in clean-up. There needs to be other agencies as well as civic groups accountable for training and notifying volunteers. The media reporting of the spill and the response to the spill was inaccurate and inflammatory. This further exasperated the cleanup effort. The response did end up going well, and all resources were used including private boat operators. Booms were used and deployment was prioritized by environmentally sensitive areas. Booms don't always work, and the technology can fail – the Bolinas Lagoon boom had to be re-set/fixed several times due to tidal currents affecting the boom.

Dan Howard commented that strategies developed before the spill for protecting specific environmentally sensitive areas were developed in isolation from strategies for other sensitive sites. Because there were as many as 20 priority sites identified for protection during a 24 hour period, resources were spread thin and crew and boom were not available to protect all the priority sites.

Clean-up techniques were covered by Dan Howard and Captain Swatland.

The Advisory Council asked if the predicted models were accurate for the spill flow. The group asked questions regarding and discussed the difficulties in predicting the currents and flows of the San Francisco Bay.

Captain Swatland addressed that the Safe Seas oil spill drill that was carried out a year ago off the Golden Gate did contribute well to the joint spill response and cleanup effort of the Cosco Busan spill.

Michael Mery commented that living in a coastal area is a privilege and carries a responsibility for the residents to take care of that environment. There should be a private and public joint responsibility to taking care of the resource in the event of a spill both physically and financially. Dan Howard responded that he agrees, and there were private citizens ready to contribute – the challenge is making sure the mechanism to certify and mobilize the private sector is integrated into the Incident Command structure.

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Tom Lambert addressed and illustrated the value of Cordell Bank within the Central California Coast, and how it could be affected by an offshore spill.

Dan Howard clarified that there had been rumors that the Farallon Islands had been oiled during this spill, but it turned out to be untrue. Oiled birds did however come ashore at the Farallones. Cordell Bank National Marine Sanctuary staff responded to the islands report by initiating offshore surveys at Cordell Bank aboard the Sanctuary vessel, C. Magister.

SAC Seat Turnover Update

– Rowena Forest

SAC seat positions newly filled and starting terms March, 2008:

Marin County Community at Large Primary – George Clyde
Sonoma County Community at Large Alternate – Brian Mulvey
Education Alternate selection has been made and awaiting final clearance from headquarters

Positions opening in February, 2008:

Sonoma County Community at Large Primary
Marin County Community at Large Alternate
Research Primary and Alternate

These have been submitted to headquarters for approval to begin advertising in the Federal Register, and to the media. Advertising will close end of January, to allow enough time for vetting of applications selected before the March, 2008 SAC meeting. Rowena requested the SAC please conduct public outreach for these open seats. There will be a link on the Cordell Bank website to the press release and application package.

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Setting SAC Meeting Dates for 2008

– Rowena Forest

The following SAC meeting dates were selected by the Council members present for the 2008 calendar year:

March 25th

May 22nd

September 4th

October 16th Retreat

December 3rd

Lunch 12:20-1:00

H.R. Bill 1187 Update – Tom Roth

Tom Lambert introduced the Sanctuary Expansion Bill, and the recommendation of the Cordell Bank Advisory Council to move the proposed expansion boundary to the west to include all of the Bodega Canyon..

(Gulf of the Farallones and Cordell Bank National Marine Sanctuaries Boundary Modification and Protection Act)

Tom Roth summarized the House Subcommittee on Fisheries, Wildlife and Oceans hearing which occurred on October 27, 2007.

Issues were raised regarding matters other than just the boundaries within the bill –

H.R.1187, included Aquaculture as an issue within the bill

Congresswoman Lynn Woolsey was disappointed in the testimony of NOAA. There were mixed signals coming from within NOAA regarding support of the bill.

Once there will be a “mark-up” of the bill there will most-likely be support for the expansion to include all of Bodega Canyon within Cordell Bank National Marine Sanctuary.

Where are we now: in a holding pattern until next year/2008. Senator Barbara Boxer may introduce a Senate companion bill.

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Tom Roth discussed the idea of attaching H.R.1187 to the Sanctuary Reauthorization Bill, and why this would not be the best option. Tom Roth discussed some of the details of the Reauthorization Bill and how it may change from the present Marine Sanctuary Authorization Bill. Tom thanked the SAC for support of H.R.1187, and Tom Lambert for his written testimony regarding Bodega Canyon. Tom Roth discussed support and questions from the public regarding the bill.

Dr. Susan Williams of U.C. Davis spoke at the hearing in support of H.R.1187.

The Council raised questions regarding any opposition from or issues regarding cruise ship discharge and wave energy development within the Sanctuary boundaries.

Aquaculture Discussion and Questions – Corey Peet, Monterey Bay Aquarium

Tom Lambert introduced, and addressed the apparent conflict within NOAA between both supporting the aquaculture industry and concerned over the effects of aquaculture on the marine environment.

Corey introduced his background and the overall issues of uncertainties of the effects of aquaculture.

Slides:

Offshore aquaculture cages

US offshore aquaculture – why? And how?

Biomass of table fish in 1900 and now

Is aquaculture the solution? – general history of aquaculture

Aquaculture's role in world fisheries

Percentage of species in aquaculture

Growth in marine aquaculture will likely involve carnivores in open systems

Characteristics of net pens

Aquaculture and sustainability

Ecological issues of concern – fishmeal and fish oil in feeds, risk of escapes, risk of disease transfer, wastes and pollution, interactions with predators

Fishmeal and fish oil

World fish supplies – producer or net consumer?

Mitigating the feed issue

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Risk of escapes – invasive species
Risk of escapes – hybridization
Mitigating the risk of escapes
Risk of disease transfer
Sea lice and salmon farming
Mitigating the disease issue
Nutrients and pollution
Poly-culture as a solution
Mitigating the issue of pollution
Interactions with predators and treatments of “pests”
Ecological view of sustainable aquaculture
U.S. offshore aquaculture – can we have our cake and eat it to?

Contacts:

Corey R. Peet
Aquaculture Manager Sustainable Seafood Initiative
Monterey Bay Aquarium
(831) 647-6827

Questions for Corey Peet –

Tom Roth asked if Corey is familiar with the California law that regulates aquaculture and his opinion of it.

Corey feels this is the most promising state bill regarding aquaculture, but it remains to be seen how regulations develop

Lisa Etherington asked Corey’s opinion of drift pens.

Corey discussed impacts of offshore and coastal aquaculture. There are no true offshore pens yet – it’s still theoretical

Dan Howard asked if there is evidence of Atlantic and Pacific salmon inter-breeding
Corey responded No, and clarified the status of offshore pens.

Lance Morgan asked if there were recommendations to seafood consumers based on the aquaculture issues. Corey noted that there are several recommendations per species.

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Corey noted that the World Wildlife Fund has Aquaculture Dialogues - a process analyzing the key impacts of each species and farming method – with scientific studies – to develop a metric for certification of aquaculture methods. More information on this can be found on the World Wildlife Fund website.

Captain Swatland asked what is driving the aquaculture industry, is it demand for seafood that wild-caught fisheries cannot supply? Corey agreed with this, but pointed out an uncertainty that the demand for seafood may not be sustainable. Also, aquaculture provides the ease of harvesting from a farm, etc.. The focus for aquaculture operations should be on shellfish, seaweed, and low trophic level fish that will not have a smaller impact on the environment and other species.

Tom Roth asked who are the major stakeholders of the aquaculture industry? Is it big corporations or specialty groups? Corey – the main proponent of aquaculture is NOAA at this point. It is an expensive industry, and most-likely will be dominated by larger corporations due to the expense of farming/aquaculture – not as likely for smaller or local operations to succeed.

Meeting Adjourned – 2:40 pm

Action Items:

Motion

Doreen Gurrola moved to accept 9-19-07 minutes as amended

Lance Morgan seconds

All in favor

**Cordell Bank National Marine Sanctuary
Advisory Council Meeting Agenda
PRBO
December 6th, 2007
Attachments**

Attachment #1

Manager's Report – Dan Howard

December 2007 Manager's Report/ CBNMS SAC

Budget – We will be on a continuing resolution through the end of December which means no spending unless approved by HQ.

Management Plan – Finished final edits on final rule/regulations which will now be reviewed by NOAA attorneys. It is looking like the management plan will be finished sometime this summer.

Cosco Busan oil spill – we have been working on developing criteria that will determine sign off endpoints for coastal beaches. When is a section clean and cleared for the responsible party to walk away.

I will defer my comments on the Sanctuary expansion hearing because Tom Roth will be reporting on that later in the meeting.

Attachment #2

Research Report – Lisa Etherington

Research Report-Sanctuary Advisory Council meeting, December 6, 2007

A presentation was made by Lisa Etherington, who provided highlights from a recent NOAA Fisheries cruise aboard the NOAA vessel David Starr Jordan to Cordell Bank from November 12-14, 2007. The Chief Scientist was Dr. Susan Sogard (NOAA Fisheries, Santa Cruz). Lisa Etherington participated in the cruise as a means to improve and foster new relationships with researchers doing work in Cordell Bank National Marine Sanctuary as well as to acquire information on the Sanctuary ecosystem.

The primary objective of the cruise (which included daytime operations) was to test methods of measuring schooling rockfish with an ROV (using lasers). The target species were chilipepper, widow, and yellowtail rockfish. The goal was to compare size estimates between ROV methods & direct measurements of individuals caught with hook and line.

A secondary objective of the cruise (which included nighttime operations) was to collect jumbo squid (*Dosidicus gigas*) basic life history data. Ken Baltz (NOAA Fisheries, Santa Cruz) was the lead scientist on this aspect of the cruise, and was joined by Dr. Lou Zeidburg (Hopkins Marine Station), who is also working on this project. Operations included: 1) sampling adults with hook and line and collecting information on age, diet, maturity stages, and mating history; 2) sampling paralarvae with plankton tows; and 3) sampling water column properties (including dissolved oxygen) to assess habitat use patterns.

The presentation provided still images from the ROV of benthic communities and habitats at various locations just north of Cordell Bank – regions of the sanctuary that have not been previously explored. The presentation also included photos of the jumbo squid sample collection.